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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,341	08/03/2000	Suzanne M. Jordan	END9 2000 0041 US1	9659
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Shelley M Beckstrand PC			EXAMINER	
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Owego, NY 1	3827		ART UNIT	PAPER NUMBER
			3626	
			DATE MAILED: 08/29/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

b	Application No.	Applicant(s)				
	09/632,341	JORDAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Rachel L. Porter	3626				
The MAILING DATE of this communication app Period for Reply	ears on the cover she	et with the correspondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, no within the statutory minimum vill apply and will expire SIX (6 cause the application to become	nay a reply be timely filed of thirty (30) days will be considered timely) MONTHS from the mailing date of this co				
1)⊠ Responsive to communication(s) filed on 28 ħ	May 2003 .					
	is action is non-final.					
3) Since this application is in condition for allowa	ince except for forma	I matters, prosecution as to th	e merits is			
closed in accordance with the practice under a Disposition of Claims	Ex parte Quayle, 193	5 C.D. 11, 453 O.G. 213.				
4)⊠ Claim(s) <u>1-28</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>1-7,10 and 11</u> is/are allowed.						
6)⊠ Claim(s) <u>8,9 and 12-28</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requiremen	t.				
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner.						
• •						
Priority under 35 U.S.C. §§ 119 and 120	n priority under 25 LLS	C & 110(a) (d) or (f)				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:	s have been received	•				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)	-					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Noti	rview Summary (PTO-413) Paper No(ice of Informal Patent Application (PTO) er:				

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DETAILED ACTION

Notice to Applicant

1. This communication is in response to the application filed 5/28/03. Claims 1-28 are pending.

Drawings

- 2. The objection to the drawings for including a reference sign, 332 on Figure 5, not mentioned in the description is hereby withdrawn due to the amendment filed 5/28/03.
- 3. The objection to the drawings for not including a reference sign, 224 on page 9, lines 11, and 18, mentioned in the description is hereby withdrawn due to the amendment filed 5/28/03.

Specification

4. The objections to the specification for issues raised in the previous Office Action (Paper No. 5) are hereby withdrawn due to the amendment filed 5/28/03.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 6. Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed toward non-statutory subject matter.
- (A) The basis of this rejection is set forth in a two-prong test:
 - (1) whether the invention is within the technological arts;

(2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to the statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In this case, claim 18 only recites an abstract idea. The recited steps of identifying goals, building a model, performing analysis, identifying new sources, implementing tools, and generating metrics do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to define the measures of performance of a customer information technology organization.

In its current context, the "database" recited in the claim does not may simply refer to paper files. The deficiencies in the present claim may be overcome by simply expressly stating in the body of the claim the use of technology such as a processor and a computer database.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces measurement reports and definitions.

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Although the recited process produces a useful, concrete and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter.

(B) The rejection of claims 1-17 and 20-21 under 35 U.S.C. 101 are hereby withdrawn due to the amendment filed 5/28/03.

Claim Rejections - 35 USC § 112

- 7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 8. Claims 8-9,12-15,16,17,18,19,22,25,27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- (A) Claim 8 recites the limitation "said measure" in line 17. There is insufficient antecedent basis for this limitation in the claim. Although the claim recites two types of measurement (i.e. behavioral measurement and contract measurement), it does not recite a "measure." The Examiner suggests the use of consistent terminology throughout the claim to refer the same elements (i.e. using the term measure or measurement or metric, rather than using these terms interchangeably.) Moreover, the Examiner suggests identifying which measure/ measurement is being referenced in line 17 of the present claim. (i.e. said contract measure or said behavioral measure).

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Claim 9 is dependent from claim 9. Therefore, claim 9 inherits the deficiencies claim 8 through dependency, and is also rejected.

Claim 12 recites the limitations "said metric" in lines 12-13 and "each said measure" and "each other measure" in lines 14-15. There is insufficient antecedent basis for these limitations in the claim. The claim does not recite a single "measure" or a "plurality of measures." The Examiner suggests the use of consistent terminology throughout the claim to refer the same elements (i.e. using the term measure or measurement or metric, rather than using these terms interchangeably).

Claims 13-15 are dependent from claim 12. Therefore, claims 13-15 inherit the deficiencies claim 12 through dependency, and are also rejected.

Claim 18 recites the limitations "said measure" in lines 18 and "each said measure" and "each other measure" in lines 20-21. There is insufficient antecedent basis for these limitations in the claim. Although the claim recites two types of measurement (i.e. potential measurement and contract measurement), it does not recite a "measure." Moreover, the claim does not recite a single "measure" or a "plurality of measures." The Examiner suggests the use of consistent terminology throughout the claim to refer the same elements (i.e. using the term measure or measurement or metric, rather than using these terms interchangeably). Moreover, the Examiner suggests identifying which measure/ measurement is being referenced in lines 18-21 of the present claim. (i.e. said contract measurements or said potential measurements).

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Claim 19 recites the limitation "said computer" in line 24. There is insufficient antecedent basis for this limitation in the claim, since claim 19 does not recite "a computer" as a part of the system.

Claim 22 recites the limitations "said metric" in lines 26-27 and "each said metric" and "each other metric" in lines 28-29. There is insufficient antecedent basis for these limitations in the claim. Although the claim recites "primitive metrics," it does not recite "a metric" or "a plurality of metrics." The Examiner suggests the use of consistent terminology throughout the claim to refer the same elements (i.e. using the term measure or measurement or metric, rather than using these terms interchangeably). The Examiner will interpret "said metric(s)" or "each other metric" as referring to the primitive metrics recited in the claim.

Claim 25 recites the limitations "said metric" in line 15 and "each said metric" and "each other metric" in lines 13-14 and 16-17. There is insufficient antecedent basis for these limitations in the claim because the claim does not recite "a metric" or "a plurality of metrics." The Examiner suggests the use of consistent terminology throughout the claim to refer the same elements (i.e. using the term measure or measurement or metric, rather than using these terms interchangeably.)

Claim 18 recites the limitations "said metric" in lines 22 and "each said measure" and "each other measure" in lines 20-21 and 23-24. There is insufficient antecedent basis for these limitations in the claim. Although the claim recites two types of measurement (i.e. potential measurement and contract measurement), it does not recite a single "metric" or a "plurality of metrics." The Examiner suggests the use of consistent

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terminology throughout the claim to refer the same elements (i.e. using the term measure or measurement or metric, rather than using these terms interchangeably.)

Moreover, the Examiner suggests identifying which metric/ measurement is being referenced in lines 20-24 of the present claim. (i.e. said contract measurements or said potential measurements).

- (B) Claim 16 is vague and indefinite because it is unclear whether the "means operable" positive and definitely perform the functions recited in the claim in lines 4-13. If the Applicant intends to claim "means for developing... measurement solution, means for validating, and means for transferring" as described in the applicant's specification, the Examiner suggests moving (or removing) the phrase "operable during...phase," to place the claim language in proper "means + function" format.
- (C) Regarding claim 17, the phrase "any other requirements" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "any other requirements"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Allowable Subject Matter

- 9. Claims 1-7 and 10-11 are allowed.
- 10. Claims 8-9,12-17,19, and 22-27 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

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- 11. Claim 18 would be allowable if rewritten or amended to properly incorporate subject matter that applies, involves, uses, or advances the technological arts to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.
- 12. The following is a statement of reasons for the indication of allowable subject matter:

Exemplary claim 1 is directed toward a method for identifying customer/organization goals, behaviors related to those goals, identifying new data sources, determining metrics related to behaviors, and building measurement models based upon information gathered. The closest prior art of record Davis et al ("The Information System Consultant's Handbook: Systems Analysis and Design", CRC Press) in view Nagai teach a system and method for identifying customer/organization goals, mapping behaviors to measures (i.e. metrics), relating different measures to one another and building models. However, the closest prior art of record does not teach or fairly suggest the combination of:

- 1) building measurement model work product by building a first draft measurement model and a second draft measurement model;
- 2) building the first draft measurement model by selectively executing a first prioritization process and a second prioritization process, wherein the first prioritization process determines for each measure a relationship with each behavior satisfied by the measure and wherein the second prioritization process determines for each measure a relationship with each other measure; and

3) building said second draft measurement model by selecting measures prioritized selectively by behaviors satisfied and related measures.

Dependent claims 2-3 incorporate the allowable subject matter of claim 1, through dependency, and are also allowable for the same reasons.

Independent claims 4,6,8,10,12,16-19,22-27 incorporate the same combination of allowable features indicated above and are also allowable for the same reasons.

Claim Rejections - 35 USC § 102

13. The rejection of claims 1-7, 10-17, and 22-26 under 35 U.S.C. 102(b) as being anticipated by Davis et al. ("The Information System Consultant's Handbook: Systems Analysis and Design", CRC Press) is hereby withdrawn due to the amendment filed 5/28/03.

Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. Claims 20-21 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, and further in view of Nagai et al. (US 2001/0025247 A1).

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(A) As per claim 20, Davis teaches a method for defining a measurements model work product comprising:

- a) defining the goals of a customer information technology organization (Davis; section 8.2, lines 1-5);
- b) defining behaviors associated with those goals (Davis; section 35.4.1, 35.4.3.1, lines 1-21 and sections 74.1 and 74.4.1);
- d) building a first draft measurement model from the measures (Davis; Figure 31.1, and section 31.4; 74.4.4.7);
- g) iterative prototyping method which produces new models based on findings and (Davis; section 31.4.1-31.4.2 and Figure 31.1). (i.e. building second, third, nth models responsive to said prioritizing steps)

Davis does not teach c) the mapping of behaviors against a measurement catalog. Nagai teaches the mapping of behaviors to a catalog of measures (Nagai: Figure 11-12). For example, the method maps mail receiving, reception notification, and mail list display functions against degree of functional sufficiency. (i.e. mapping behaviors to measurements) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method of Davis with the mapping of behaviors and measurements selected from a repository taught by Nagai with the motivation of "supporting preliminary estimation of the effects of a system and a configuration proposal at a planning stage of construction/improvement of an information system" (Nagai, paragraph 0002, lines 7-10).

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Davis also does not teach e) the prioritizing of the measures with respect to the number of behaviors satisfied. Nagai teaches the prioritization based on the number of behaviors satisfied (Nagai, Figure 21). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the prioritization scheme of Nagai to the method of Davis with the motivation of providing a "method of evaluating the functional suitability between the business process, and the information system, and a system configuration proposal support tool" (Nagai; page I, paragraph 0004, lines 27-29);

Davis does not teach f) the prioritization of measures with respect to the number of related measures. Nagai teaches the setting of a degree of relationship between data of the business model and the functional item resource (Nagai; Figure 11, paragraph 0049; see also 103,133-135;). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the prioritization of Nagai to the method of Davis with the motivation of quantitatively evaluating the influences of a support information system and the ability of a related worker on a business process and system configuration method (Nagai, page 2, paragraph 0012, lines 3-5).

- (B) As per claim 21, Davis teaches the comparison of the old model to the new requirements to determine the missing data measurements (Davis; sections 3.4, 3.4.1.1-3.4.1.4).
- (C) Apparatus claim 28 differs from claim 20, respectively, in that claim 20 contains a method recited as a series of function steps whereas claim 28 contain features recited in a "means plus function" format. As the method of step claim 20 has been shown to be disclosed or obvious by the combined teachings of Davis and Nagai, it is readily

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apparent that the "means" to accomplish those method steps is obvious in view of the prior art. As such, the limitations recited in claim 28 are rejected for the same reasons given for method claim 20, respectively, and incorporated herein.

16. The rejections of claims 8-9,18, and 27-28 under 35 U.S.C. 103(a) as being unpatentable over Davis, and further in view of Nagai et al. (US 2001/0025247 A1) are hereby withdrawn due to the amendment filed 5/28/03.

Response to Arguments

- 17. Applicant's arguments, see Paper No. 7, filed 5/28/03, with respect to the newly added limitations of claims 1-7, 10-17, and 22-26 distinguishing over the prior art of record, have been fully considered and are persuasive. The rejections of claims 1-7, 10-17, and 22-26, under 35 U.S.C. 102 (b), have been withdrawn.
- 18. Applicant's arguments, see Paper No. 7, filed 5/28/03, with respect to the newly added limitations of claims 8-9,18-19, and 27 distinguishing over the prior art of record, have been fully considered and are persuasive. The rejections of claims 8-9,18-19, and 27, under 35 U.S.C. 103 (a), have been withdrawn.
- 19. Applicant's arguments filed 5/28/03 have been fully considered but they are not persuasive.
- (A) On pages 40-41, the Applicant argues the Examiner has used improper hindsight in applying references to the Applicant's claimed invention.

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In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Davis discloses the use of iterative prototyping as explained in the rejection of claim 20 above. One of ordinary skill in the art would have understood that this iterative process requires the generation of two or more prototypes (i.e. models) to develop a solution.

(B) On pages 40-41, the Applicant argues that the prior art fails to distinguish between "behaviors and objectives" and does not apply "measures" as defined in the applicant's specification.

In response, the Applicant does not point to, nor was the Examiner able to find strict definitions for "behaviors" and "measures" in the applicant's specification.

Instead, the specification includes non-committal language to indicate what these terms may include. For example, page 24, lines 1-4 say that behaviors are "typically simple sentence structures" and "may be incomplete sentences." The specification goes on to explain that these behaviors may represent ideas or activities. This explanation of a

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behavior as either an action *or an idea* fails to provide a distinction over the term "objective".

Consequently, in the absence of a strict definition for the terms in the claims, the Examiner has given these terms the broadest reasonable interpretation and has applied art accordingly.

Conclusion

- 20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Powers et al (USPN 5,500,795) discloses a system and method for generating performance variables that reflect an organization's efficiency.
 - Anonymous ("Researchers Probe Software Quality") summarizes approaches to evaluate and improve software development.
 - Basili et al ("Improve Software Quality by Reusing Knowledge and Experience") discloses techniques for quality improvement in the software industry.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel L. Porter whose telephone number is 703-305-0108. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (703)305-9588. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

RP

August 22, 2003

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JOSEPH THOMAS

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